IN THE CLAIMS

Please replace any previous listing of the claims with the following replacement listing of the claims:

Replacement Listing of the Claims

1-15. (Canceled)

16. (Previously presented) The method of claim 52, wherein said data structure further comprises an identity of each of said attributes and an identity of each of said events.

17. (Canceled)

18. (Previously presented) The method of claim 16, wherein said activity attributes and said event attributes are selected from the group consisting of: time stamp, activity and item used in said industrial process.

19. (Previously presented) The method of claim 18, wherein said item is an equipment, and wherein each of said activity attributes and each of said event attributes has an attribute value selected from the group consisting of: date and time, activity identity and device of said equipment used in said industrial process.

20. (Previously presented) The method of claim 16, wherein at least one of said event attributes matches at least one of said activity attributes.

21. (Original) The method of claim 19, wherein said event data is linked to said device of said equipment.

22. (Previously presented) The method of claim 52, wherein said request identifies said first event with a reference selected from the group consisting of: time based reference with respect to an interval of said first activity, direct reference to said first activity and indirect reference to said first activity.

23. (Original) The method of claim 22, wherein said time based reference is with respect to all events that occur during said interval.

24. (Previously presented) The method of claim 22, wherein said direct reference directly refers to said first activity.

25. (Previously presented) The method of claim 22, wherein said indirect reference includes a reference to an item used by said industrial process during said first activity.

26. (Canceled)

27. (Previously presented) The apparatus of claim 53, wherein said data structure further comprises an identity of each of said attributes and each of said events.

28. (Canceled)

29. (Previously presented) The apparatus of claim 27, wherein said activity attributes and said event attributes are selected from the group consisting of: time stamp, activity and item used in said industrial process.

30. (Previously presented) The apparatus of claim 29, wherein said item is an equipment, and wherein each of said activity attributes and each of said event attributes has an attribute value selected from the group consisting of: date and

time, activity identity and device of said equipment used in said industrial process.

31. (Previously presented) The apparatus of claim 27, wherein at least one of said event attributes matches at least one of said activity attributes.

32. (Original) The apparatus of claim 30, wherein said event data is linked to said device of said equipment.

33. (Previously presented) The apparatus of claim 53, wherein said request identifies said first event with a reference selected from the group consisting of: time based reference with respect to an interval of said first activity, direct reference to said first activity and indirect reference to said first activity.

34. (Original) The apparatus of claim 33, wherein said time based reference is with respect to all events that occur during said interval.

35. (Previously presented) The apparatus of claim 33, wherein said direct reference directly refers to said first activity.

36. (Previously presented) The apparatus of claim 33, wherein said indirect reference includes a reference to an equipment used by said industrial process during said first activity.

37-41. (Canceled)

42. (Currently amended) A computer apparatus for ~~accessing~~ processing output data of an industrial process~~, said apparatus~~ comprising:

a ~~processor~~ computer, a database and a monitor that collects said output data of said industrial process and provides said output data to said computer,

wherein said computer comprises ~~and~~ an activity framing program that when executed responds to input data entered by a user to define a data structure,

wherein said activity framing program responds to said input data to define said data structure with a plurality of activities and events of said industrial process, at least a first attribute of a first one of said activities, and at least one attribute of a first one of said events, wherein said first event is time framed by said first activity, wherein said first attribute of said first activity has an attribute value that is linked to said first event, and wherein said request additionally identifies said attribute value, wherein said first attribute identifies an item used in said process and said attribute value identifies a device that is associated with said item and that is linked to said first event,

wherein said framing program uses said data structure to store said output data in said database based on said activities, events and attributes, and

wherein said framing program further responds to a request that identifies said first activity and said first attribute of said first activity by using said data structure to access said output data of said industrial process stored in said database to retrieve event data of said first event.

43 and 44. (Canceled)

45. (Previously presented) The computer apparatus of claim 42, wherein said first activity further comprises a second attribute, and wherein said first and second attributes define start and end times of said first activity, respectively.

46. (Canceled)

47. (Previously presented) The computer apparatus of claim 46, wherein said data structure is stored in one of said database and a separate memory.

48. (Currently amended) A method for using a computer to ~~access~~ process output data of an industrial process, ~~said method~~ comprising:

operating said computer with an activity framing program in response to input data entered by a user to define a data structure,

wherein said activity framing program responds to said input data to define said data structure with a plurality of activities and events of said industrial process, at least a first attribute of a first one of said activities, and at least one attribute of a first one of said events, wherein said first event is time framed by said first activity, wherein said first attribute of said first activity has an attribute value that is linked to said first event, and wherein said request additionally identifies said attribute value, wherein said first attribute identifies an item used in said process and said attribute value identifies a device that is associated with said item and that is linked to said first event,

wherein said framing program uses said data structure to store said output data in a database based on said activities, events and attributes, and

wherein said framing program further responds to a request that identifies said first activity and said first attribute of said first activity by using said data structure to access said output data of said industrial process in said database to retrieve event data of said first event.

49 and 50. (Canceled)

51. (Currently amended) A memory media comprising a computer readable activity framing program that when executed on a computer ~~for controlling~~ controls said ~~a~~ computer to process ~~time series~~output data of an industrial process, ~~said memory media comprising:~~

wherein said ~~program instructions of an~~ activity framing program ~~for controlling a~~ controls said computer in response to input data entered by a user to define a data structure,

wherein said activity framing program responds to said input data to define said data structure with a plurality of activities and events of said industrial process, at least a first attribute of a first one of said activities, and at least one attribute of a first one of said events, wherein said first event is time framed by

said first activity, wherein said first attribute of said first activity has an attribute value that is linked to said first event, and wherein said request additionally identifies said attribute value, wherein said first attribute identifies an item used in said process and said attribute value identifies a device that is associated with said item and that is linked to said first event,

wherein said framing program uses said data structure to store said output data in a database based on said activities, events and attributes, and

wherein said framing program further responds to a request that identifies said first activity and said first attribute of said first activity by using said data structure to access said output data of said industrial process in said database to retrieve event data of said first event.

52. (Currently amended) A method for using a computer to access output data of an industrial process that is stored in a memory, said method comprising:

(a) operating said computer with a program that generates ~~generating~~ an access request that is based on a data structure that comprises a plurality of activities and events of said industrial process, one or more attributes of a first one of said activities, and one or more attributes of a first one of said events, wherein said first event is framed by said first activity; wherein a first attribute of said first activity has an attribute value that is linked to said first event, and wherein said request additionally identifies said attribute value, wherein said first attribute identifies an item used in said process and said attribute value identifies a device that is associated with said item and that is linked to said first event,

wherein said output data is stored in said memory based on said activities, events and attributes, and

(b) operating said computer with said program in response to said access request, using said data structure to access said output data of said industrial process in said memory to retrieve event data of said first event.

53. (Currently amended) A computer apparatus for accessing ~~time series~~output data of an industrial process that is stored in a memory, said computer apparatus comprising:

a ~~processor~~ computer and a framing program that generates an access request that is based on a data structure that comprises a plurality of activities and events of said industrial process, one or more attributes of a first one of said activities, and one or more attributes of a first one of said events, wherein said first event is time framed by said first activity, wherein a first attribute of said first activity has an attribute value that is linked to said first event, and wherein said request additionally identifies said attribute value, wherein said first attribute identifies an item used in said process and said attribute value identifies a device that is associated with said item and that is linked to said first event;

wherein said output data is stored in said memory based on said activities, events and attribute; and

wherein said ~~processor~~ computer in response to said access request, uses said data structure to access said output data of said industrial process in said memory to retrieve event data of said first event.

54. (Currently amended) A memory media ~~for controlling a~~ comprising a computer readable activity framing program that when executed on a computer controls said computer to ~~access time series~~process output data of an industrial process stored in a memory, ~~said memory media comprising:~~

~~program instructions of an~~ wherein said activity framing program ~~for controlling a~~ controls said computer to generate an access request that is based on a data structure that comprises a plurality of activities and events of said industrial process, one or more attributes of a first one of said activities, and one or more attributes of a first one of said events, wherein said first event is time framed by said first activity, wherein a first attribute of said first activity has an attribute value that is linked to said first event, and wherein said request additionally identifies said attribute value, wherein said first attribute identifies an

item used in said process and said attribute value identifies a device that is associated with said item and that is linked to said first event;

wherein said output data is stored in said memory based on said activities, events and attribute; and

wherein said activity framing program ~~instructions cause~~ control said computer to respond to said access request by using said data structure to access said output data of said industrial process in said memory to retrieve event data of said first event.